

## **Applied Visit 11/4/98**

Matt and I talked to Frank about some of the requirements for the Pirani/ATM switch that is currently made as a special by MKS Vacuum Products Group.

## **93-7585 Customer Requirements**

### ***Indicators***

LED indication for 41 series relay status (Labeled "ATM").

LED indication for 325 series relay status (Labeled "VAC").

Indicators are to be green per the IBM specification

### ***Relays***

Frank would like capability to use a set point relay from the Pirani sensor. We considered 50 Torr to be a good first stab at a "VAC" set point value.

### **Pirani Relay output**

Frank wants to use the same 9 Pin D-sub that they are currently using instead of a different connector such as the 15 pin HD D-sub. The relay contacts will be run out to the unused pins on the 9-pin Dsub. However, I am sure if this catches on, other groups will want the 15 pin HD D-sub so they do not have to change the wiring harness that they may already have for the 275 Convection.

### **Pin Assignment**

325 SP COM tied to PIN 7 (93-7585)

325 SP NC tied to PIN 9 (93-7585)

### ***External (USER) Adjustment***

Frank would like the ability to adjustment of the set point value of the Pirani sensor. This could be provided if size and cost allow it.

## **Foreline vacuum Gauge.**

Frank was interested in replacing the Edwards Pirani gauge on the foreline. This means a version of the 325 that has essentially a 0-10V output. We have already allowed for the placement of gain resistors on the Hitachi version of the 325 and it is CE marked. However, 1% tolerance resistors produce a significant error beginning around 50 Torr. If this becomes a problem, MKS should plan on actually putting in a trim pot for gain adjust and as well as adding offset adjustment so that the output curve can be "calibrated" to reduce error from the nominal curve. A new part number will be given for the CE marked version of the 325 with a 8-VCR F fitting and an output of 0-10V.

Part Number: 103250031

Description: ASSY, 325,CE,8VCRF,3XOUT